

PRELIMINARY AMENDMENT
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said incident light by said PPCT is in the range of 320-600 nm,
and maximal fluorescence emission by said PPCT is in the range
300-700 nm.

Claim 2. (Amended) The isolated polynucleotide molecule of
claim 1, wherein said PPCT has a maximal absorbance of said
incident light in the range of 550-580 nm, and a maximal
fluorescence emission in the range of 400-630 nm.

Claim 3. (Amended) An isolated polynucleotide molecule
comprising a nucleotide sequence encoding a pigment protein from
coral tissue (PPCT), wherein said polynucleotide molecule
comprises a nucleotide sequence encoding a protein having the
N-terminal amino acid sequence:

SVIAK (SEQ ID NO:1).

Claim 4. (Amended) An isolated polynucleotide molecule
comprising a nucleotide sequence encoding a pigment protein from
coral tissue (PPCT), wherein said polynucleotide molecule
comprises a nucleotide sequence encoding a protein having the
N-terminal amino acid sequence:

SVIAKQMTYKVYMSGTV (SEQ ID NO:2).

Claim 5. (Amended) The isolated polynucleotide molecule of
~~claim 1, 2, 3~~ or 4, wherein said PPCT comprises a chromatophore
region comprising the amino acid sequence: QYG.

Claim 6. (Amended) The isolated polynucleotide molecule of
~~claim 5,~~ wherein said polynucleotide molecule comprises a
nucleotide sequence encoding a protein having an amino acid
sequence corresponding to the sequence shown as SEQ ID NO:3
or 4.

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Claim 7. (Amended) The isolated polynucleotide molecule of claim 5, wherein said polynucleotide molecule comprises a nucleotide sequence which has at least 80% identity to the sequence shown as SEQ ID NO:5 or 6.

Claim 8. (Amended) The isolated polynucleotide molecule of claim 7, wherein said polynucleotide molecule comprises a nucleotide sequence which has at least 90% identity to the sequence shown as SEQ ID NO:5 or 6.

Claim 9. (Amended) The isolated polynucleotide molecule of claim 7, wherein said polynucleotide molecule comprises a nucleotide sequence which has at least 95% identity to the sequence shown as SEQ ID NO:5 or 6.

Claim 10. (Amended) The isolated polynucleotide molecule of claim 7, wherein said polynucleotide molecule comprises a nucleotide sequence substantially corresponding to the sequence shown as SEQ ID NO:5 or 6.

Claim 11. (Amended) A substantially pure protein comprising the N-terminal amino acid sequence:

SVIAK (SEQ ID NO: 1).

Claim 12. (Amended) A substantially pure protein comprising the N-terminal amino acid sequence:

~~SVIAKQMTYKVYMSGTVN (SEQ ID NO:2).~~

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Claim 14. (Amended) The protein of claim 13, wherein said protein can be purified from coral tissue from a coral family selected from the group consisting of: *Pocilloporidae*, *Acroporidae*, *Poritidae*, *Faviidae*, *Merulinidae* and *Fungiidae*.

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Claim 17. (Amended) A vector comprising a polynucleotide molecule of claim 1, 2, 3 or 4.